# U.S. Department of the Interior
# Bureau of Land Management

**Draft Environmental Assessment MT- DOI-BLM-MT-L070-2015-0005-EA**
**February 17, 2015**

# Upper Missouri National Wild and Scenic River (UMNWSR) Recreation Site Enhancement and Fence Exclosures

***Location:*** UMNWSR corridor between Coal Banks Landing and James Kipp Recreation Area

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# CHAPTER 1
# INTRODUCTION AND NEED FOR THE PROPOSED ACTION

## INTRODUCTION

This assessment concerns recreational use and the primary conflicts associated with that use as categorized by public comment since the designation of this area as a National Wild and Scenic River in 1976. Since before the designation to the present day conflicts between recreational users and livestock, specifically within designated camping areas, have been at the forefront of comments entertained by park rangers, recreation planners and others responsible for the recreation management of this resource. For the majority of visitors recreating along the UMNWSR, overnight camping is an expected activity for any multi-day trip with the majority of existing campgrounds located in riparian areas and cottonwood forests much sought after by users due to shade, fuel and other potential recreational opportunities. During the summer boating season normal weather patterns typically present warm, dry conditions, compelling many visitors to seek areas where "shade" is one of the most sought after natural amenities. Like humans, livestock are attracted to these same areas and their prolonged presence grazing, loafing and trailing within the boat camps results in defecation, removal of vegetation and livestock trails in and around camping and eating areas used by the public, thus exacerbating the conflicts. In the past, successful mitigation measures to contain or alleviate these conflicts were implemented by constructing fence exclosures at various locations

PROPOSED ACTION

The BLM proposes to construct fenced exclosures at selected recreation sites along the UMNWSR corridor. Exclosures as defined by Merriam-Webster dictionary; are an area from which intruders (such as grazing animals) are excluded by fencing or other means. The proposed exclosures would be constructed on public land or in some cases, private land under a scenic use easement between the landowner and BLM. The lease agreement associated with this assessment specifically provides for establishment of a public campground that may include a sealed vault toilet, fire rings, camp sites, access roads, boundary fencing and signage. Construction would commence in 2015 with less labor intensive sites and continue over the course of several years based on funding, staffing, and logistical feasibility due to unforeseen circumstances (weather, road conditions, etc.). The fence would be constructed according to BLM standards for fences located in deer, elk, bighorn sheep and/or antelope habitat under conditions requiring extreme restriction of livestock movement. The *Bureau of Land Management Fencing Manual Handbook H-1741-1* recommends a four-strand barbed wire fence with a maximum wire height of **42** inches. The recommended wire spacing is 16, 6, 6, and 12 inches as measured from the ground with bottom wire smooth. To better facilitate wildlife passage the bottom wire will be 18" from ground and top wire 40". This would be measured from the ground 18, 5, 5, 12 inches, and no wire stays will be used. Exclosures would be four sided with back and sides consisting of three strand wire fence, two strands of barbed wire, and a bottom strand of smooth wire set 18" up from the ground to facilitate wildlife passage. The fence would have wooden brace posts at all four corners and two post/pole walk thru

gates for pedestrian passage. The front of the fence (river view side) would be constructed of posts/poles or in a "jack-leg" style. The resultant fence would blend with the existing cultural landscape with the post pole or jack-leg portion the most visually evident section from the river. The fences would exclude livestock from established recreation sites, mitigate conflicts between livestock and recreationists and will be designed to blend with the visual resource. Some of the exclosures will include insertion of recreation site enhancement amenities such as fire rings and or composting toilets or vault toilets. The approximate size of each exclosure varies by location from approximately 2 to 4 acres. Appendix A lists the proposed sites and the locations on public land with site descriptions, maps and visual diagrams of each site to include existing and proposed site amenities.

## PURPOSE AND NEED FOR THE PROPOSED ACTION

The purpose of this project is to construct drift fences and fence exclosures at selected recreation sites on public and private land and install recreation based amenities at some of the locations (fire rings and toilets). The need is to significantly reduce conflicts between livestock use and recreationists in BLM designated camping areas and to enhance the recreational experience at selected sites. While one portion of the proposed project would occur on private lands with an existing lease agreement, the expenditure of public funds constitutes a federal action. A Wyden Amendment justification would be used to document the benefit to public resources from the expenditure of funds for projects that occur on private lands.

## CONFORMANCE WITH BLM LAND USE PLAN(S)

The fences would be constructed primarily on BLM administered lands or on private lands with support from the landowner and where BLM maintains public recreational access easements. The proposed action is in conformance with the UMRBNM Resource Management Plan. "The existing camping facilities will remain at the current campsites along the Missouri River. Additional Level 1 and 2 sites will only be considered from Fort Benton downstream to Judith Landing. Improvements to existing Level 1 and 2 sites could occur to improve infrastructure or address visitor use issues. Additional Level 2 sites could be constructed between Fort Benton and Judith Landing as necessary to improve resource conditions, improve distribution of visitor use or resolve visitor use conflicts. Associated facilities and construction could not detract from the visual character and integrity of the UMNWSR. No additional Level 2 sites will be constructed below Judith Landing. Additional Level 3 campsites could be added as needed to accommodate increases in use, disperse visitor use along the Missouri River, and rest or rotate the use of individual sites." In addition, the plan states; "The BLM will maintain all developed sites. New capital improvements will be allowed if impacts to cultural and natural resources can be mitigated to an acceptable level. All improvements will comply with the Wild and Scenic Rivers Act, as amended.

**RELATIONSHIPS TO STATUTES, REGULATIONS AND OTHER PLANS**

The proposed action is consistent with the Upper Missouri National Wild and Scenic River Management Plan Update (February 1993). "Recreation areas will be identified with proposed development and fencing where needed to exclude livestock. Recreation areas will be strategically located to provide safe and comfortable locations for river visitors."

# CHAPTER 2

# DESCRIPTION OF ALTERNATIVES

## INTRODUCTION

This EA focuses on the Proposed and No Action alternatives. While the No Action alternative does not meet the purpose and need of the EA, it is considered and analyzed to provide a baseline for comparison of the impacts of the Proposed Action. The proposed projects would occur primarily on BLM administered land and private land under a formal recreation based easement.

## NO ACTION

The BLM would not construct any additional drift fences, fence exclosures or install any additional recreation based amenities at selected sites along the UMNWSR corridor.

## PROPOSED ACTION

The BLM would construct fences and fence exclosures at designated recreation areas on public land or in some cases, private land under a scenic use easement between the BLM and private landowner. The fence would be constructed according to BLM standards for fences located in deer, elk, and/or antelope habitat under conditions requiring extreme restriction of livestock movement. The *Bureau of Land Management Fencing Manual Handbook H-1741-1* recommends a four-strand barbed wire fence with a maximum wire height of 42 inches. The recommended wire spacing is 16, 6, 6, and 12 inches as measured from the ground with bottom wire smooth. The recommended wire spacing is 16, 6, 6, and 12 inches as measured from the ground with bottom wire smooth. To better facilitate wildlife passage the bottom wire will be 18" from ground and top wire 40". This would be measured from the ground 18, 5, 5, 12 inches, and no wire stays will be used. Steepness of slope is another consideration in fence design and location. For example, a 42-inch fence constructed on a 50% slope creates a barrier height of 75 inches. The fences would be three strand wire fence, two strand barbed wire and a bottom strand of smooth wire set 18" up from the ground to facilitate wildlife passage. Fences may be flagged with plastic clips where deemed necessary to enhance visibility to

wildlife. The exclosures will be four sided with back and sides consisting of four strand wire fence, three strands of barbed wire, and a bottom strand of smooth wire set 18" up from the ground to facilitate wildlife passage. The fence will have wooden brace posts at all four corners and two post/pole walk thru gates for pedestrian passage. The front of the fence (river view side) will be constructed of posts/poles or in a "jack-leg" style. The fence would blend with the existing cultural landscape with the post/pole or jack-leg portion the most visually evident section from the river. The fences would exclude livestock from established recreation sites, mitigate conflicts between livestock and recreationists and will not detract from the visual resource. Some of the exclosures will include insertion of recreation site enhancement amenities such as fire rings and or composting toilets or vault toilets. The approximate size of each exclosure varies by location from approximately 2 to 4 acres. Appendix A lists the proposed sites and the locations on public land with site descriptions, maps and visual diagrams of each site to include existing and proposed site amenities.

Table 2.1 reflects the affected recreation sites from a recreational perspective when using the Upper Missouri River Breaks National Monument Boaters Guide, Volume 1 and 2, highlighting the sections from Fort Benton downstream to Judith Landing (Volume 1) and Judith Landing downstream to Kipp Recreation Area (Volume 2). The information in much of these guides are keyed to features by "river miles" which is the distance along the river traveling downstream (generally west to east) from Fort Benton, Montana (River Mile 0). Features along the river are identified and discussed in the text by "river mile" left or right (L or R) and enable users to quickly locate specific river sections of the UMNWSR. Using the aforementioned boater's guides one can pinpoint the proposed sites using river miles or by using the Public Land Survey System (PLSS) township and range method.

*Table 2.1. Sites, Ownership, River Mile, Location, project & estimated completion year*

| Site | Ownership | River Mile | Location | Project/Year |
|---|---|---|---|---|
| Lonetree Coulee | Private/BLM Lease | 49L | T26 N R12 E Sec 13 | Exclosure+/2015-2018 |
| Dark Butte | BLM | 68.8L | T23 N R14 E Sec 4 | Exclosure/2016 |
| Pablo Rapids | BLM | 72.8L | T23 N R14 E Sec 12 | Exclosure/2017 |
| The Wall | BLM | 81.3L | T22 N R15 E Sec 2 | Exclosure+/2016 |
| McGarry Bar | BLM | 103.3L | T23 N R18 E Sec 24 | Exclosure/2016 |
| Greasewood Bottom | BLM | 109.6L | T23 N R19 E Sec 3 | Exclosure+/2017 |
| Hideaway | BLM | 136.7L | T23 N R22 E Sec 26 | Drift fence/2015 |
| Hideaway 2 | BLM | 138.4R | T23 N R23 E Sec 31 | Fire ring/2015 |

+ Includes additional amenities such as fire rings or vault/composting toilets

**REQUIRED DESIGN FEATURES:**

- Wildlife fencing stipulations would include a smooth bottom wire that is at least 18" off the ground and a top wire maximum height of 40".
- To protect vegetation, project activities shall not be performed during periods when the soil is too wet to adequately support equipment/vehicles. If equipment/vehicles create ruts in excess of 3 inches deep, operations must cease as the soil will be deemed too wet to adequately support equipment/vehicles.
- All exclosures accessible by ground will incorporate a standard, vehicle passible, gate to allow for weed control equipment to enter the site.
- All vehicles and equipment should be thoroughly cleaned to remove weed seed prior to entering the project site.
- Prior to leaving the site, clothing and equipment should be inspected for weed seed (i.e. burs on clothing, downy/Japanese brome seed in socks). If found, the seeds should be removed, bagged and disposed of in a sanitary landfill.
- Prior to construction sites will be cleared for nesting raptors. If present construction will be delayed until conclusion of nesting, to prevent a "Taking" under the Migratory Bird Treaty Act.
- No trees or brush will be removed to construct these fences. Fences on slopes will be modified to accommodate wildlife.
- "Post/Pole or Jack leg" fence top rail should be no more than one meter high to allow mule and white-tail deer to jump.

# CHAPTER 3

# AFFECTED ENVIRONMENT/ENVIRONMENTAL IMPACTS

## INTRODUCTION AND GENERAL SETTING

The proposed actions are located in designated recreation sites within the badlands adjacent to the Upper Missouri National Wild and Scenic River. The badlands consist of sagebrush grasslands, grasslands, and lightly vegetated badlands. Mixed shrub communities are common in woody draws and flats throughout all of these vegetation types. The bottomland includes native forests of cottonwood, green ash, and willow.

*Table 3.1: Critical Elements*

| CRITICAL ELEMENTS | | |
|---|---|---|
| **Determination*** | **Resource** | **Rationale for Determination** |
| NI | Air Quality | Air quality in the project area is excellent and unlikely to be affected by the proposed action. |
| NP | Areas of Critical Environmental Concern | |

| | | |
|---|---|---|
| PI | Cultural Resources | Discussed under Resource C – Cultural Resources and National Historic Trails |
| NP | Environmental Justice | |
| PI | Farmlands (Prime or Unique) | Discussed under Resource B - Rangeland Vegetation/Livestock Grazing Management |
| PI | Floodplains | Discussed under Resource A – Riparian-Wetland/Water Resources |
| PI | Invasive, Non-native Species | Discussed under Resource F – Invasive Species |
| PI | Native American Religious Concerns | Discussed under Resource C – Cultural Resources and National Historic Trails |
| PI | Threatened, Endangered or Candidate Plant or Animal Species | Discussed under Resource E - Wildlife habitat |
| PI | Wastes (hazardous or solid) | Discussed under Resource D - Recreation, Visuals, and Wild and Scenic Rivers. |
| PI | Water Quality (drinking/ground) | Discussed under Resource A – Riparian-Wetland/Water Resources |
| PI | Wetlands/Riparian Zones | Discussed under Resource A – Riparian-Wetland/Water Resources |
| PI | Wild and Scenic Rivers | Discussed under Resource D – Recreation, Visuals, and Wild and Scenic Rivers. |
| NP | Wilderness | |

*Possible determinations:
NP = not present in the area impacted by the proposed or alternative actions
NI = present, but not affected to a degree that detailed analysis is required
PI = present and may be impacted to some degree. Will be analyzed in affected environment and environmental impacts. (NOTE: PI does not mean impacts are likely to be significant in any way).

## RESOURCES CARRIED FORWARD FOR ANALYSIS

### RESOURCE A: Riparian Wetland/Water Resources

The existing condition of the Missouri River and associated riparian-wetland vegetation on the Missouri River within the proposed project areas is Proper Functioning Condition (PFC). The condition of PFC is in compliance with BLM regulatory standards and is an acceptable condition with Montana Department of Environmental Quality for mitigating nonpoint source pollution. While the purpose of the proposed action is to mitigate livestock recreation conflicts, the proposed fences are within or partially within riparian-wetland areas.

Generally, the proposed fences (with the exception of Hideaway 1) would be located in mature cottonwood forest with an understory of mesic grasses. Smooth brome is an abundant understory grass at these sites, and it is highly invasive. Hideaway 1 is the exception because the proposed exclosure includes the developing, riverbank riparian-wetland area. The riverbank plant community includes sandbar willow and wooly sedge. In addition, the understory of the mature cottonwood forest includes an understory of shrub woody species.

## NO ACTION

The functional condition of the floodplain, riparian-wetland area, and river would remain in PFC. Nonpoint source pollutants would continue to be mitigated.

## RESOURCE A: Riparian Wetland/Water Resources

## PROPOSED ACTION

### Direct and Indirect Impacts of the Proposed Action

The proposed fence construction would not result in any measurable disturbance of riparian-wetland area, floodplain, or river bank areas; therefore, there would be no direct impacts.

Indirect impacts would result from changes in grazing management following fence construction. At most of the proposed sites, the indirect impacts would be negligible because the existing understory is invasive, competitive grasses; there would not likely be a marked change in the composition or condition of the understory. The exception would be at Hideaway 1 where the proposed exclosure includes the riverbank riparian-wetland community as well as the mature woodland. While there are some limiting factors to riparian-wetland development, these areas at Hideaway 1 would have the opportunity to reach their ecological capability under the proposed action alternative.

In summary, the direct and indirect impacts of the proposed action would maintain or slightly improve riparian-wetland conditions and water resources.

### Cumulative Impacts of the Proposed Action

While there are many cumulative impacts in a watershed the size of the Missouri River, including but not limited to irrigation withdrawals, flow regulation, nonpoint source runoff from cultivated fields, stormwater runoff from municipalities, nonnative invasive plant and aquatic species, channel modifications, etc., the anticipated direct and indirect impacts of the proposed action are expected to maintain or improve the riparian-wetland, floodplain, and river conditions. Since the direct and indirect impacts would maintain or improve conditions, cumulative impacts would remain the same or improve.

## RESOURCE B: Rangeland Vegetation/Livestock Grazing Management

### River Left

The dominant vegetation associated with the proposed project areas consists of a cottonwood woodland with an understory of grasses and shrubs. As you move away from the river, these woodlands turn to a grassland/shrubland typically dominated by upland grasses with an overstory of sagebrush and greasewood. Many of the understory

species within the proposed project area are introduced species such as smooth brome and quackgrass.

With the exception of Sneath Common #06218 (The Wall –Bottom #5) and Antelope Creek #05610 (Hideaway #1), all of the upland plant communities within the allotments surrounding the proposed project areas are in proper functioning condition and meet all standards of rangeland health.

White Rocks #06426 (Lone Tree Coulee) grazing allotment is currently authorized under a custodial grazing authorization at 42 AUMs from 6/1 to 10/31. Upland assessments completed in 2014 indicated that all Standards of Rangeland Health were being met.

Dark Butte #6215 (Dark Butte)-grazing allotment is currently authorized at 326 AUMs from 6/1 to 10/5. A custodial authorization allows 33 AUMs from 3/1 to 2/28 on a mostly private upland pasture and some dispersed upland public land tracts. Upland assessments completed in 2014 indicated that all Standards of Rangeland Health were being met.

Pablo Rapids #06216 (Pablo Rapids) grazing allotment is authorized at 104 AUMs from 6/15 to 8/9. Upland assessments and point intercept transects completed in 2014 indicate that all Standards of Rangeland Health were being met.
Sneath Common #06218 (The Wall – Bottom #5) grazing allotment is authorized at 344 AUMs from 6/10 to 10/21. When last assessed in 2010, the upland plant communities in bottoms #1, 3, and 5 were not meeting standards 1 (upland health) and 5 (biodiversity) due to invasive species (cheatgrass, Japanese brome, smooth brome), noxious weeds, prairie dogs, and livestock grazing. The areas identified as not meeting standards are not within the proposed project area.

Greasewood #6282 (Greasewood) grazing allotment is currently authorized at 94 AUMs from 9/25 to 10/19. Upland assessments completed in 2014 indicated that all Standards of Rangeland Health were being met.

Antelope Creek #05610 (Hideaway) grazing allotment is authorized for 4,121 AUMs from 5/15 to 12/15. Problems identified within upland plant communities and the associated wildlife habitat within the Antelope Creek allotment have already been addressed in the Antelope Creek #05610 Grazing Permit Modification Environmental Assessment #DOI-BLM-MT-L070-2010-0008-EA which shortened the grazing season by 30 days, suspended 473 AUMs, and established allowable livestock use levels within critical areas of the allotment. The areas identified as not meeting standards are not within the proposed project area.

**River Right**

The dominant vegetation type in both of these allotments consists of a sagebrush/grass mix followed by ponderosa pine/juniper. Grasslands with Douglas fir/ponderosa pine mixed with shrubs also common throughout the uplands.

The Demars #20026 (Hideaway 2) grazing allotment is currently under a three pasture deferred rotation grazing management program. This allotment is currently authorized 390 AUMs of grazing from 6/1-10/31. Upland range assessment conducted previous to 1998 indicated that pasture 2 was functioning at risk with a late seral ecological site rating, and pasture 3 had a proper functioning condition with a potential natural community rating. No information was given for pasture 1. Changes to improve range health were taken at that time.

The Mattuschek #20045 (McGarry Bar) grazing allotment is currently under a 5 pasture rotation, with a split season of use along the river from 5/6-6/5 (Spring) and 9/10-10/31 (Fall). The allotment is currently authorized a total of 876 AUMs from 5/6-10/31 and 14 AUMs from 3/1-2/28.Range health assessments conducted previous to 2002 indicated that all pastures except for the McDonald Ridge Pasture was meeting the upland health standard. Changes to improve range health were taken at that time.

**NO ACTION**

Under this alternative, there would be no additional impacts to upland/riparian vegetation or livestock grazing management. Recreation sites at Pablo Rapids and The Wall would remain within livestock exclosures, with the option to use livestock grazing vegetation treatment/management tool at BLM discretion. Livestock grazing management would continue as currently authorized by the associated term grazing permits and leases.

**RESOURCE B: Rangeland Vegetation/Livestock Grazing Management**

**PROPOSED ACTION**

**Direct and Indirect Impacts of the Proposed Action**

White Rocks #06426 (Lone Tree Coulee) grazing allotment. Under this alternative, approximately 4 acres would be excluded from livestock grazing within the allotment. This would reduce the forage available to livestock by approximately 1 AUM. This would be considered a negligible reduction in forage and the grazing permit would not be altered.

Dark Butte #6215 (Dark Butte) grazing allotment. Under this alternative, approximately 4 acres would be excluded from livestock grazing within the allotment. This would reduce the forage available to livestock by approximately 1 AUM. This would be considered a negligible reduction in forage and the grazing permit would not be altered.

Pablo Rapids #06216 (Pablo Rapids) grazing allotment. Under this alternative, the proposed exclosure would be within the existing exclosure. There would be no additional impacts to vegetation or livestock grazing management. The existing exclosure would remain in place as it currently serves as one of the permanent ungrazed Multiple Indicator Monitoring (MIM) study sites on the Missouri River.

Sneath Common #06218 (The Wall – Bottom #5) grazing allotment. Under this alternative, the proposed exclosure would be within the existing exclosure. There would be no additional impacts to vegetation or livestock grazing management. The existing exclosure would remain in place as it currently serves as one of the permanent ungrazed MIM study sites on the Missouri River.

Greasewood #6282 (Greasewood) grazing allotment. Under this alternative, approximately 2 acres would be excluded from livestock grazing within the allotment. This would reduce the forage available to livestock by less than 1 AUM. This would be considered a negligible reduction in forage and the grazing permit would not be altered.

Antelope Creek #05610 (Hideaway) grazing allotment. Under this alternative, approximately 45 acres would be excluded from livestock grazing within the allotment. This would reduce the forage available to livestock by approximately 10 AUMs. Given the size and permitted use within this allotment, a reduction of 10 AUMs would still be considered negligible and the grazing permit would not be altered.

Demars #20026 (Hideaway 2) grazing allotment. This area is currently excluded from livestock grazing by an allotment boundary fence which runs from the river to the southeast and the Charles M. Russell National Wildlife Refuge boundary fence running east-west. If at some point there is a need to build an exclosure fence, there would be no net reduction to AUMs as this area is currently excluded from livestock grazing.

Mattuschek #20045 (McGarry Bar) grazing allotment. Livestock are currently restricted from using this area from June 6th- September 9$^{th}$. In addition, a drift fence is in place to help manage livestock movement within the McGarry Bar area. A small exclosure of this size would not reduce the amount of available forage by any measurable amount. This would be considered a negligible reduction in forage and the grazing permit would not be altered.

Impacts Common to All Proposed Project Areas: Failure to remove vegetation within exclosures could lead to a buildup of fine fuels and increase fire danger near the camp sites. Increases in invasive grass species such as cheatgrass, Japanese brome, smooth brome, quack grass, and common reed may result from lack of grazing. Increases in these species has been documented at other sites along the Missouri River which have been excluded from grazing.

**Cumulative Impacts of the Proposed Action**

In comparison to the size and extent of the Upper Missouri River, it is unlikely that exclosures of this size will have a noticeable impact to upland plant communities as a whole. The amount of forage made unavailable to livestock is negligible and will not impact current livestock grazing operations or BLM grazing permits.

**RESOURCE C: Cultural Resources and National Historic Trails**

The Monument Proclamation calls out cultural resources as objects of the Monument; homesteads, tepee rings are just some of ther physical record of human presence and influence on the landscape. Included in the objects are less tangible physical remains of historic events such as the Corps of Discovery's journey up and down the Missouri River, as well as Prince Mamillian and Karl Bodmer's 1833 exploration memorialized in journals and art. Rather than preserving the record of their impact, the landscape that they encountered has become embodied as part of their historic exploration.

A review of the cultural resource site and inventory database (3/12/15) revealed little documented inventory of the area of potential effect. Archaeologists completed inventories along the Missouri River in the 1960 and 1970s, recording numerous sites along the banks of the river. Sites were re-examined in the early 1990s when the BLM prepared the UMNWSR Cultural Resource Management Plan (Knudson 1992). Further analysis occurred in 2004 with a geoarchaeological analysis of the relationship between geologic landform and the location or likelihood of archaeological sites (Eckerle etal 2006). Recent site monitoring conducted by BLM archaeologists, contract archaeologists, and Montana Site Stewards, have confirmed the locations of some of these sites, but have failed to relocate other archaeological sites that had been recorded in cut banks along the river. The assumption is that many of these buried sites, exposed on these steep,unstable slopes, have been eroded by the river during high flows, bank collapse, and ice scouring.

Lewis & Clark scholar Bob Bergantino documented one Lewis & Clark campsite within the area of potential effect (APE). The proposed McGarry Bar development would be in the vicinity of the May 27, 1805 campsite. No other sites have been documented within the APE. That could be a result of a lack of inventory, poor documentation from the early inventories, the covering of the sites from sheet erosion/deposition, bank failure, or ground cover limiting surface visibility.

**NO ACTION**

Selecting this alternative would have a "No Historic Properties Affected" determination. People would continue to camp at existing and designated campsites, as well as dispersed and unidentified locations based on amenities desired. Current use has not noticeably impacted cultural resources or values associated with the Lewis & Clark National Historic Trail.

**PROPOSED ACTION**

**Direct and Indirect Impacts of the Proposed Action**

Fenced exclosures would add a visual component to the landscape that would not be appropriate in a landscape associated with aboriginal sites or the Lewis and Clark National Historic Trail. Making fences more visible by adding plastic clips for wildlife safety adds to their intrusive nature. Any time ground-disturbing acitivity occurs, the potential increases to disturb subsurface artifacts and features. The proposed campsite

development at McGarry Bar has the greatest potential to adversely affect historic properties, particularly the May 27, 1805 Lewis & Clark campsite. Excavating for the fire ring, and directing concentrated use at the Lewis & Clark marker, increases the probability of impacting any features that may be present at this location. Constructing a fence at this location will modify the setting and feeling of this historic site.

**Cumulative Impacts of the Proposed Action**

Developing recreation sites has the potential to increase visitor use at specific, directed location, which could lead to greater impacts at designated areas, while reducing impacts at other areas. Since we have no identified sites at all of the areas proposed for development except for one (McGarry Bar), there should be no increase in impacts to historic properties/archaeological sites. McGarry Bar development could lead to degradation of the integrity of the Lewis & Clark campsite by changing the setting and feeling of the historic property.

All of the proposed development would be within the Lewis & Clark National Historic Trail corridor. Site-specific affects to the trail are limited to McGarry Bar; cumulative impacts to the trail are negligible.

**RESOURCE D: Recreation, Visuals, and Wild and Scenic Rivers**

The primary recreational uses in the proposed area are river recreation (both private and commercial) such as boating (both motorized and non-motorized), camping, fishing, hunting and sightseeing and wildlife watching. Recreational use is present within the area year round but is dependent upon river conditions from November thru March and road conditions every month of the year. Since before the designation to the present day conflicts between recreational users and livestock, specifically within designated camping areas, have been at the forefront of comments entertained by park rangers, recreation planners and others responsible for the recreation management of this resource. For the majority of visitors recreating along the UMNWSR, overnight camping is an expected activity for any multi-day trip with the majority of existing campgrounds located in riparian areas much sought after by users due to shade, fuel and other potential recreational opportunities. During the summer boating season normal weather patterns typically present warm, dry conditions, compelling many visitors to seek areas where "shade" is one of the most sought after natural amenities. Like humans, livestock are attracted to these same areas and their prolonged presence grazing, loafing and trailing within the boat camps results in defecation, removal of vegetation and livestock trails in and around camping and eating areas used by the public, thus exacerbating the conflicts. In the past, successful mitigation measures to contain or alleviate these conflicts were implemented by constructing fence exclosures at various locations. UMRBNM River Rangers have documented "observations and recommendations" from the recreating public and compiled them in an annual Patrol Summary every year since 2002. In every summary repeat observations and recommendations are highlighted with conflicts between livestock and desire for additional exclosures listed at the forefront of this report every year. In addition, many of the commercial outfitters who have attended our River

Outfitter meeting annually from 2008 to present reflect the same observations and recommendations (livestock, recreationalist conflicts and desire for additional exclosures, and recreation amenities such as fire rings, shelters and additional toilets). From a purely recreational standpoint the construction of exclosures and insertion of recreational; amenities such as fire rings and toilets at the aforementioned locations will mitigate the conflicts between livestock and recreational users and provide additional recreational enhancement amenities.

**NO ACTION**

Recreation: The recreation, Visual Resource Management (VRM) and Wild and Scenic Rivers impacts would remain the same under this alternative. A proactive approach to mitigating the conflicts between livestock and recreational users would not be attempted and recreational enhancement amenities at selected sites would not be implemented both of which could prove detrimental to future recreational opportunities along the river corridor. There would be no change to the current view shed within the area of the proposed action, thus no impact. Selection of this alternative would maintain the status quo.

**PROPOSED ACTION**

**Direct and Indirect Impacts of the Proposed Action**

Visitor use on the river is recorded with reasonable accuracy from May thru October using self-registration and face to face contact from BLM staff at specific launch points within the river corridor. Recreational use along the Upper Missouri National Wild and Scenic River (UMNWSR) from 2003 – 2014 indicates a total of 56,317 registered visitors engaged in boating activity on the Upper Missouri with 45,054 of that number, approximately 80% reporting use in the area between Fort Benton and Judith Landing, the primary section of river impacted by this action and 20% between Judith Landing and James Kipp Recreation Area. Recreational impacts from construction of exclosures and recreational site amenity enhancement projects will impact visitors temporarily if the work is conducted during the peak visitation periods (June-September).

**Visual Resource Management (VRM):** The proposed action lies within VRM Class I Class II, Class III and Class IV classifications. The objective of VRM Class I is to preserve the existing character of the landscape. This class provides for natural ecological changes; however, it does not preclude limited management activity. The object of VRM Class II is to retain the existing character of the landscape. The level of change to the characteristic landscape should be low. Management activities may be seen, but should not attract the attention of the casual observer. The objective of VRM Class IV is to provide for management activities that require major modifications of the existing character of the landscape. Public land within the impacted areas is assigned a VRM class based on a process that utilizes scenic quality and sensitivity to changes in the landscape contingent upon the distance zone from which a project or proposal would be seen by the casual observer. Construction of additional fencing at the aforementioned sites could impair the scenic value as they will be visible from the river corridor, however, the proposed fences are designed to blend with the landscape and will conform with existing fencing patterns along the river corridor.

Construction periods will temporarily impact the view shed during the initial building phase with logistical efforts (mechanical equipment, staff, equipment, etc.) visible for short periods to include any surface or vegetative disturbances created by the equipment. Upon completion of the projects fencing erected around the sites will be visible at every location and may detract from the visual quality of selected areas for some users.

**Wild and Scenic Rivers:** The UMNWSR is unique in certain aspects of boundary designation because the entire river does not fall under the normal regulatory requirements of the Wild and Scenic Rivers Act that directs boundaries (in wild sections) would not exceed ¼ mile on each side of the river. When the Upper Missouri was added to the national system, Public Law 94-486 amended the act and required the BLM "where necessary to provide a rim to rim corridor" and to determine which of the three national wild and scenic river classifications best fit portions of the river. Because the UMNWSR contains shoreline resources that far exceeded the ¼ mile limitation the boundary was adjusted to accommodate these factors. There are two exceptions to the rim-to-rim boundary; between Fort Benton and Coal Banks Landing and within the Charles M. Russell Wildlife Refuge where BLM management is restricted to bank to bank. The proposed exclosures and recreation site amenity enhancement locations are within the boundary. Areas impacted by the action within the UMNWSR corridor are located within all three classifications of the Wild and Scenic Rivers Act, to include Wild, Scenic and Recreational segments. Wild sections are defined as "those rivers or sections of rivers that are free of impoundments and generally inaccessible except by trail, with watersheds or shoreline essentially primitive and water unpolluted. These represent vestiges of primitive America". Scenic sections are defined as "Those rivers or sections of rivers that are free of impoundments, with shorelines or watersheds still largely primitive and undeveloped, but accessible in places by roads". Recreational sections are defined as "Those rivers or sections of rivers that are readily accessible by road or railroad, that may have some development along their shorelines and that may have undergone some impoundment or diversion in the past". The proposed action is in direct compliance with general management actions outlined within Part of the Upper Missouri National Wild and Scenic River Management Plan Update [February 1993] wherein specific actions relating to /or recreational areas. Additionally, the plan emphasizes management strategies to maintain or establish riparian habitat may include establishing riparian pastures, temporary or permanent river corridor fencing and other methods.

**Cumulative Impacts of the Proposed Action**

**Recreation:** Long term impacts of this action from a recreational viewpoint are seen as highly beneficial to visitors and far outweigh the temporary, minimal impacts visitors may encounter upon the initial implementation of the project. Reduced conflicts between recreational users and livestock is a highly sought after condition and recreational amenities at selected sites will provide recreational visitors with an enhanced experience. For the majority of visitors recreating along the UMNWSR overnight camping is an expected activity for any multi-day trip with existing riparian areas much sought after by recreational users for camping due to shade, fuel and potential opportunities for hiking, hunting, fishing and sightseeing. During the summer boating season normal weather

patterns typically present warm, dry conditions compelling many visitors to seek areas where "shade" is one of the most sought after natural amenities. The enhancement of existing recreation areas or will provide expanded opportunities for future generations of visitors. Educating the public with newsletters, interpretive publications, signs and face to face briefings at river launch points on the concept, execution and anticipated results of the action will provide reasonable mitigation. To date feedback and comments from the recreational community to include visitors (at launch and take out points), commercial outfitters, Central Montana Resource Advisory Council members, and volunteers have been overwhelmingly positive. Current high use areas at designated exclosure campgrounds (Slaughter River/Hole-in-the –Wall) could be managed for periodic closure once alternative sites have been exclosed and recreation site amenities added to provide a similar experience of recreational use.

**VRM:** From a visual perspective the initial phase of the proposed action will require monitoring to ensure any surface or vegetative disturbances created is restored to the natural characteristic of the existing landscape. Medium term visual impacts will be encountered at the construction sites regarding the newly erected fences though any additional recreational amenities should not be visible. However, visitors may come to the understanding or deduce that future gains of the mitigation of conflict between livestock and themselves and a quality experience far outweigh the temporary impacts forseen over the next decade. Educating the public with newsletters, interpretive publications, signs and face to face briefings at river launch points on the concept, execution and anticipated results of the action will provide reasonable mitigation.

**WSR:** The proposed action is in direct compliance and supports the general management actions outlined within Part of the Upper Missouri National Wild and Scenic River Management Plan Update [February 1993] wherein specific actions relating to vegetation include the planting of native trees in selected areas to enhance riparian and/or recreational areas. Additionally, the plan emphasizes management strategies to maintain or establish riparian habitat may include establishing riparian pastures, temporary or permanent river corridor fencing and other methods.

**RESOURCE E: Wildlife and Fisheries**

*Wildlife - General:*

Wildlife species within the project area include species typically associated with central Montana and the Missouri River Breaks habitat. Mule deer, elk, pronghorn, bighorn sheep, raptors, furbearers, reptiles and amphibians are common throughout the analysis area. The project area is within identified elk, pronghorn, bighorn sheep, and mule deer year round range. For a complete listing of species which could occur within the project area, see Upper Missouri River Breaks National Monument (UMRBNM) Resource Management Plan (RMP) (December 2008).

*Threatened, Endangered and Species Proposed for Listing:*
Pallid Sturgeon(Endangered) occur in the Missouri River adjacent to proposed project work. Pallid sturgeon or crucial habitat will not be affected by any of the alternatives. There are no other threatened, endangered or wildlife species proposed for listing present in the area of the proposed action. There is no designated critical habitat for any other species within the project area.

*Designated Sensitive Species:*

Townsend's big-eared bat, long-eared myotis, long-legged myotis, and fringed myotis have habitat and could occur within available habitat in and adjacent to the proposed projects; however, there are no documented roosting sites within the project areas. Bald and golden eagles are documented within the project area along the Missouri River, and all known nests have been documented. Surveys for new or additional nests will be inventoried prior to any project work during the nesting season. The greater short-horned lizard occupies open sagebrush grassland habitat and badland habitat and is present within the project area. Spiny soft-shelled turtle, Milk snake, and Plains spadefoot toad, are all present within or adjacent to the project areas, utilizing shoreline riparian habitat or upland habitat adjacent to project areas. Black-tailed prairie dog occupy habitat within the project area. Most BLM Designated Sensitive Species(IM No. MT-2014-067) have no suitable habitat within the project area or will not be affected by the proposed action.

*Migratory Birds:*
The Migratory Bird Treaty Act (16 USC 703-711) protects all migratory birds including raptors, and those listed as BLM Sensitive Species. The sagebrush/grassland and ponderosa pine/Douglas-fir habitat types occur within the project area. The species present are those common to these habitat types within northcentral Montana. The riparian and woodland communities along the Missouri River are important nesting, feeding, roosting and stopover for many migratory species, including several Designated Sensitive Species. Less than 1% of the Monument is riparian or riparian associated woodland habitat. Yet these habitats are well documented as the most important habitat for the greatest number of species throughout the western US.

*Fisheries:*
Many native and introduced fish species occupy the Missouri River and its tributaries within the project area. Several Designated Sensitive fish species including paddlefish, sauger, and sturgeon chub occupy the Missouri River adjacent to the project areas. No fish species will be affected by any of the alternatives.

**NO ACTION**

*Wildlife - General:*

The ongoing impacts currently occurring will continue under no action. There will be no additional impacts.

*Threatened, Endangered and Species Proposed for Listing:*

Pallid Sturgeon(Endangered) occur in the Missouri River adjacent to proposed project work. Pallid sturgeon or crucial habitat will not be affected by any of the alternatives. There are no other threatened, endangered or wildlife species proposed for listing present in the area of the proposed action. There is no designated critical habitat for any other species within the project area.

*Designated Sensitive Species:*

The ongoing impacts currently occurring will continue under no action. There will be no additional impacts. Most BLM Designated Sensitive Species(IM No. MT-2014-067) have no suitable habitat within the project area or will not be affected by the proposed action.

*Migratory Birds:*

The ongoing impacts currently occurring will continue under no action. There will be no additional impacts.

*Fisheries:*

No fish species will be affected by any of the alternatives.

**PROPOSED ACTION**

*Wildlife - General:*

The addition of fences in multiple locations, primarily located in or adjacent to the riparian and deciduous woodland habitat, will increase those impacts at all sites. Construction may disturb species or remove vegetation utilized by many species. The fences will become a wildlife obstacle which will alter animal movements, and may cause direct mortality. The "jack leg" fences constitute a greatest barrier to big game species which will attempt to go through or under. Visually this style of fence constitutes a barrier to wildlife who will likely avoid the fence altogether, if possible. Of all the fence types currently in use within the Monument, this fence is the greatest barrier to big game species. The further development of campsites within this critical and limited habitat type, will further concentrate recreational use. As has been observed in other campsites and campsites with exclosures, this will result in additional removal of native understory vegetation, increase soil compaction at sites, encourage the conversion to non-native invasive grasses and noxious weed species. The replacement of native vegetation with invasive and weed species will cause loss of food and cover for native wildlife species.

The removal of already light grazing will allow buildup of non-native grasses, increasing the risk of wildfire within these important woodlands. This can result in the total loss or degradation of the habitat for any wildlife species dependent on these communities. This has happened twice at Grand Island, once at The Wall, and once on Wood Bottom. All of these sites were ungrazed in the years prior to escaped recreation fires. All of these fires resulted in loss off mature cottonwoods and woody understory. The exclosures at Pablo and The Wall will be inside existing scientific exclosures which have been grazed intermittently, at request of wildlife biologist to reduce fire hazard. In as these woody communities are currently irreplaceable, this is a serious threat within all of these exclosures. This could impact a wide variety of bats and migratory birds which use this habitat and vegetation for nesting, roosting, feeding, and as rests during migration.

Several amphibians and reptiles are common in the riparian and woodland communities. These species are subject to disturbance by capture or direct mortality in the case of snakes. As invasive grasses are left un-grazed, the habitat becomes more favorable to rodents, which draws in snakes to feed on them. As campers dislike sharing campsites with snakes, these are often killed.

*Threatened, Endangered and Species Proposed for Listing:*

Pallid Sturgeon (Endangered) occurs in the Missouri River adjacent to proposed project work. Pallid sturgeon or crucial habitat will not be affected by any of the alternatives. There are no other threatened, endangered or wildlife species proposed for listing present in the area of the proposed action. There is no designated critical habitat for any other species within the project area.

*Designated Sensitive Species:*

Spiny soft-shelled turtles are very intolerant of people and will even abandon nesting within sight of people. These impacts are likely already occurring at most of these sites, but could be exacerbated by development of these recreational sites. This would be most noticeable at little used sites like Pablo Rapids and Hidaway. Plains spadefoot toad and other amphibians are common in the riparian and woodland communities. These and other resident amphibians and reptiles are subject to disturbance by capture or direct mortality.

*Migratory Birds:*

The impacts from increased use by recreationist will cause less tolerant species to abandon or avoid the habitat in and adjacent to the recreational development. This would include several species of cavity nesting birds and raptors, including bald and golden eagles. Conversion to nonnative vegetation will favor non-native wildlife and native generalist species, many of which are considered pests. This would include crows, ravens, rodents, skunks, raccoons, and snakes which feed on rodents. Several of these species (crow, raven, skunk, and raccoon) increasingly prey on native species in the surrounding habitat. Incidents of recreationists caused fires have destroyed or severely damaged these woodland communities,

resulting irreplaceable loss to all wildlife species reliant on this habitat type.

*Fisheries:*

There will be no impact to fisheries from this alternative.

**Direct and Indirect Impacts of the Proposed Action**

Building exclosures and any other recreational developments in the riparian or associated woodland habitats will create additional obstacles for wildlife, additional disturbances from concentrated recreational use, additional impacts to soils, vegetative health and quality of wildlife habitat.

Steepness of slope is another consideration in fence design and location. Fences at Hidaway which tie into bluffs, will necessitate construction on steeper slopes, further impacting big game movement. For example, a 42-inch fence constructed on a 50% slope creates a barrier height of 75 inches. Due to livestock on this allotment acclimated to movement in steep terrain, the proposed fence at Hidaway may not keep cattle out of woodland habitat, but may hold them in longer and keep them from moving upstream onto private lands. This would create impacts from livestock on native vegetation where impacts are currently not an issue regarding Standards of Rangeland Health or quality wildlife habitat.

**Cumulative Impacts of the Proposed Action**

Wildlife species within the project area are already being impacted by recreational use and development at many of these sites. These impacts include disturbance, direct mortality, and alteration of habitat through soil compaction and increase in non-native vegetation, and increase in generalist wildlife species which tolerate or take advantage of presence of humans or altered habitat. The existing development of campsites within this critical and limited habitat type, concentrates recreational use in the most important wildlife habitat along the Missouri River and possibly within the Monument.

Resident reptile and amphibian species currently being impacted by existing recreational development and users, will continue at a level corresponding to amount of recreational use. These species are subject to disturbance by capture or direct mortality in the case of snakes. As invasive grasses increase, the habitat becomes more favorable to rodents, which draws in snakes to feed on them. As campers dislike sharing campsites with snakes, these are often killed.

Impacts to vegetation, wildlife, and wildlife habitat from recreational development along the river, have not been analyzed for LAC as directed for the Wild & Scenic River in the original and updated River Plan. All except two of the designated camping/recreational sites on the river have been placed in woodland habitat, critical for wildlife.

During the intensive riparian inventory completed with the National Riparian Team, BLM was able to document non-native species & cultivars getting established and

beginning to dominate sites with existing exclosures. Documentation in Oregon and other states has shown that these grasses (common reed, reed canarygrass, quackgrass, brome species) do best with light or no grazing, and can eventually dominate native riparian vegetation and woodland understory communities, as opposed to native vegetation which evolved with grazing. These same species develop thick stands of dead herbaceous vegetation which is much higher risk of burning hot in escaped fires, putting important wildlife habitat at greater risks.

Continuing to allow recreational sites in limited important wildlife habitat, will continue to degrade and put the most important, limited, and irreplaceable habitat and vegetation at risk. Once lost these woodland communities are unlikely to be replaced, due to control of water flows by upstream dams, and invasive plant species.

*Designated Sensitive Species:*
Existing disturbance and impacts to resident bat species will continue. These animals may be disturbed by campers and campfires currently occurring within woodland habitat. Bald and golden eagles are documented within the project area along the Missouri River, and McGarry Bar campground includes an active bald eagle nest. While this campground is officially closed until end of July to allow eaglets to fledge without disturbance, campers still utilize site. As this site is on floater maps and is popular with outfitters, intentionally or through ignorance, several camps a year violate this closure. This puts unnecessary stress on the eagles and could cause abandonment of the nest or chicks.

*Migratory Birds:*
The riparian and woodland communities along the Missouri River are important nesting, feeding, roosting and stopover for many migratory bird species, including raptors and several Designated Sensitive Species. Migratory bird species currently being impacted by existing recreational development and users, will continue at a level corresponding to amount of recreational use.

**RESOURCE F: Invasive Species**
All sites proposed for fencing and improvements are infested w/ state listed noxious weeds and other invasive plants of concern to BLM. Other than the Lone Tree Coulee site, BLM is actively managing invasive species to help remove these plants from these areas to mitigate dispersal through recreational activities. Stands of wild licorice have been identified as an issue for recreationists at some sites. This species is a native plant and does provide the ecological service of occupying sites where exotics would otherwise be colonizing. This is an important role in this system that experiences frequent natural disturbances due to ice and water events. In addition it has been documented as an edible and medicinal plant used by some Native American tribes.

**NO ACTION**

Invasive plants and noxious weeds will most likely persist under current management though at reduced levels due to annual monitoring and treatment.

**PROPOSED ACTION**

**Direct and Indirect Impacts of the Proposed Action**

Many of the sites have been or are already excluded from grazing or have been in the past. As such many of the effects have already been realized or observed at some sites. Repeated disturbance and soil compaction on paths and available tent sites have led to areas of bare soil and an increase in early successional annual plant species. To this extent annual bromes can cause annoyance to recreational users, and annual/biennial forbs (mustards, kochia, sweet clover, etc) can be bothersome when they become large and in the way.

In general, the lack of periodic grazing or other form of removing decadent plant material affects invasive species and their management. Invasive and noxious weeds are not as visible and may be missed during treatment and decadent plant material may intercept herbicides during application resulting in a non-lethal dose to the target plants. In addition, the accumulation of decadent plant materials does increase the potential for fire and thus puts valued cottonwood stands at risk. Many of the invasive plants would respond favorably to fire, increasing their presence at the site and their potential to spread.

It is assumed that decadent plant material would be managed in someway not specifically addressed in the proposed action. These associated actions: Periodic grazing(when available), herbicide treatments, and mechanical removal (mowing), are all possibilities. Potential affects to invasive species and their management are:

- Periodic grazing – Though they may utilize invasive plants to some level, cattle tend to favor other grass and forb species. Invasive forbs in particular are much easier to identify and treat once an area has been grazed appropriately and the removal and/or knocking down of old growth reduces the potential for herbicide interception. This option may be hard to accomplish at the appropriate time of year and annual schedule due to its dependence on the grazing permitee and their operation schedules and cooperation. The use of goats/sheep would be prohibited due to conflicts with wild sheep populations.
- Herbicide Treatments – Herbicide treatments could be possible on small scale portions of these sites and targeted specifically to one to several species. It is important to note that the BLM will not target native species (such as wild licorice) for herbicide treatment. Herbicide treatments would not be a logical long term solution as repeated annual treatments may result in bare ground and the expansion of annual grasses/forbs not affected by the herbicide.
- Mechanical Removal (mowing) – Mowing or trimming is a viable option. It is indiscriminate in mixed vegetation so targeted weed species would be harder to identify for treatment and for recreationalists to avoid. Many invasive species adapt to mowing by assuming a prostrate growth form and producing flowers/seed below the height of the mower cut. It is important to note that mowing at certain time periods may reduce or increase competitiveness and vigor for some plant species that could cause shifts in species composition over time.

**Cumulative Impacts of the Proposed Action**
Invasive and noxious plants already occur throughout much of the river corridor and do occur in each of the sites proposed for exclosure. Though the BLM does manage some of these plants to the extent practicable, they will continue to persist as part of the environment. Grazing exclusion may contribute to the loss of plant species richness and abundance (Holmen 2011) within the exclosures resulting in pockets of undesirable vegetation, such as smooth brome and reed canary grass, along the river corridor.

# CHAPTER 4
# PERSONS, GROUPS, AND AGENCIES CONSULTED

During preparation of the EA, the public was notified of the proposed action through a posting on the Lewistown Field Office NEPA Register on 02/17/2015.

**Table 4.1. List of Persons, Agencies and Organizations Consulted**

| Name/Agency | Purpose & Authorities for Consultation or Coordination | Findings & Conclusions |
|---|---|---|
| Glenn Terry | Landowner | |
| Glenn Monahan | Outfitter | |
| Nancy Schultz | Outfitter | |
| Michael Gregston | Outfitter | |
| Dyrck Van Hyning | Interested Public | |
| Beth Kampschror | Friends of the Missouri Breaks | |
| Lewis and Clark National Historic Trail | National Park Service | |
| | | |

## List of Preparers

### Table 4.2. List of Preparers

| Name (and agency, if other than BLM) | Title | Responsible for the Following Section(s) of this Document |
|---|---|---|
| **Mark Schaefer** | **Project Lead and Supervisory Outdoor Recreation Planner** | **Recreation, Visual Resource Management, Wild and Scenic Rivers** |
| **Chad Krause** | **Hydrologist** | **Riparian-wetland/Water Resources** |
| **Tom Darrington** | **Rangeland Management Specialist** | **Upland Vegetation and Livestock Grazing Management** |
| **Ben Hileman** | **Rangeland Management Specialist** | **Upland Vegetation and Livestock Grazing Management** |
| **Zane Fulbright** | **Archeologist** | **Cultural Resources, National Historic Trails** |
| **Jody Peters** | **Wildlife Biologist** | **Wildlife and Fisheries** |
| **Kenny Keever** | **Natural Resource Specialist – Weeds** | **Invasive Species** |
| | | |

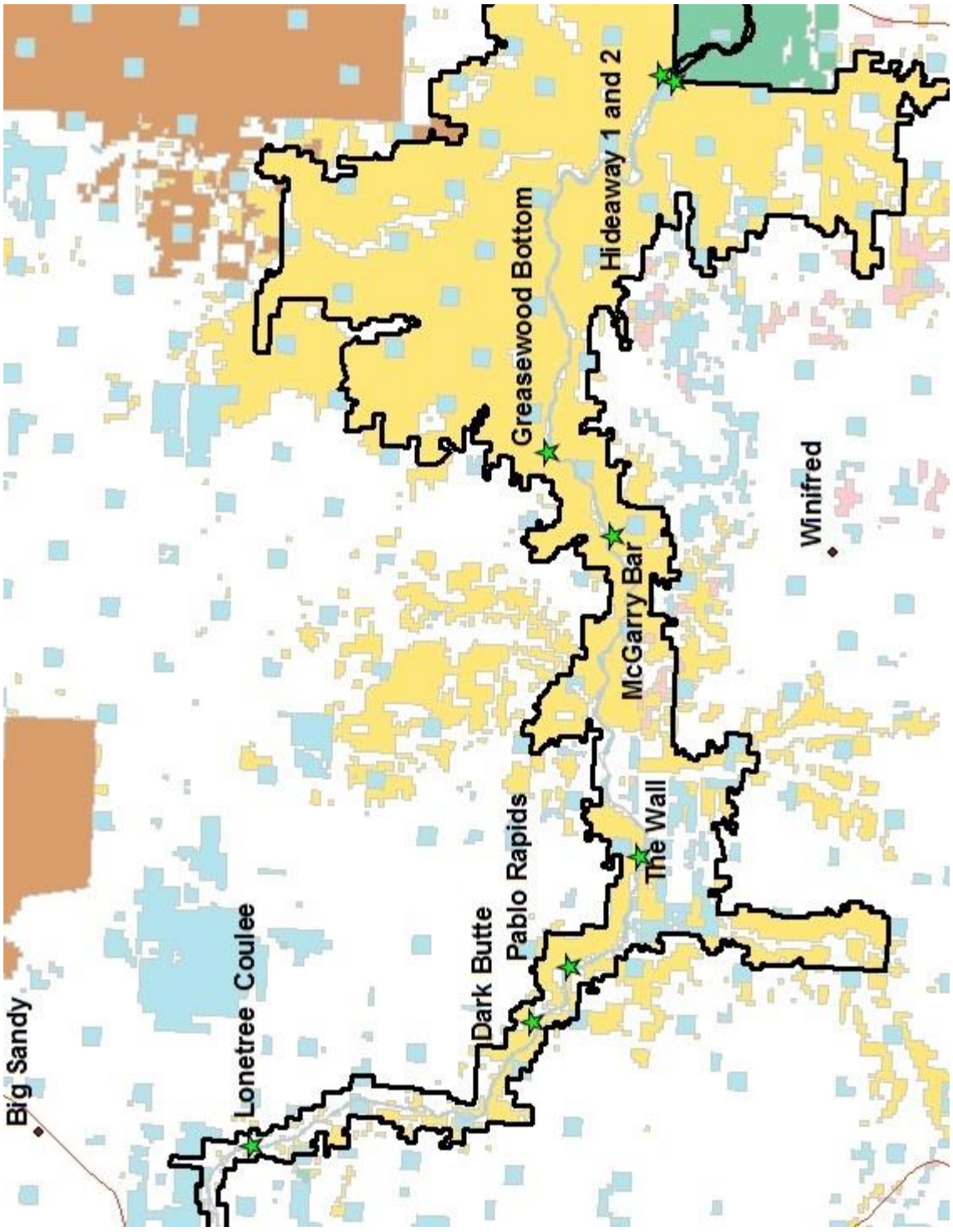
**Eckerle, William, Stephen A. Aaberg, Marissa Taddie, and Sasha Taddie**
**2006 Upper Missouri Breaks Cultural Resource and Geoarchaeological Assessment and Modeling Project: Choteau, Fergus, Phillips, And**

**Blaine Counties, Montana. Report prepared for: Montana State Office and Lewistown Field Office, Bureau of Land Management**

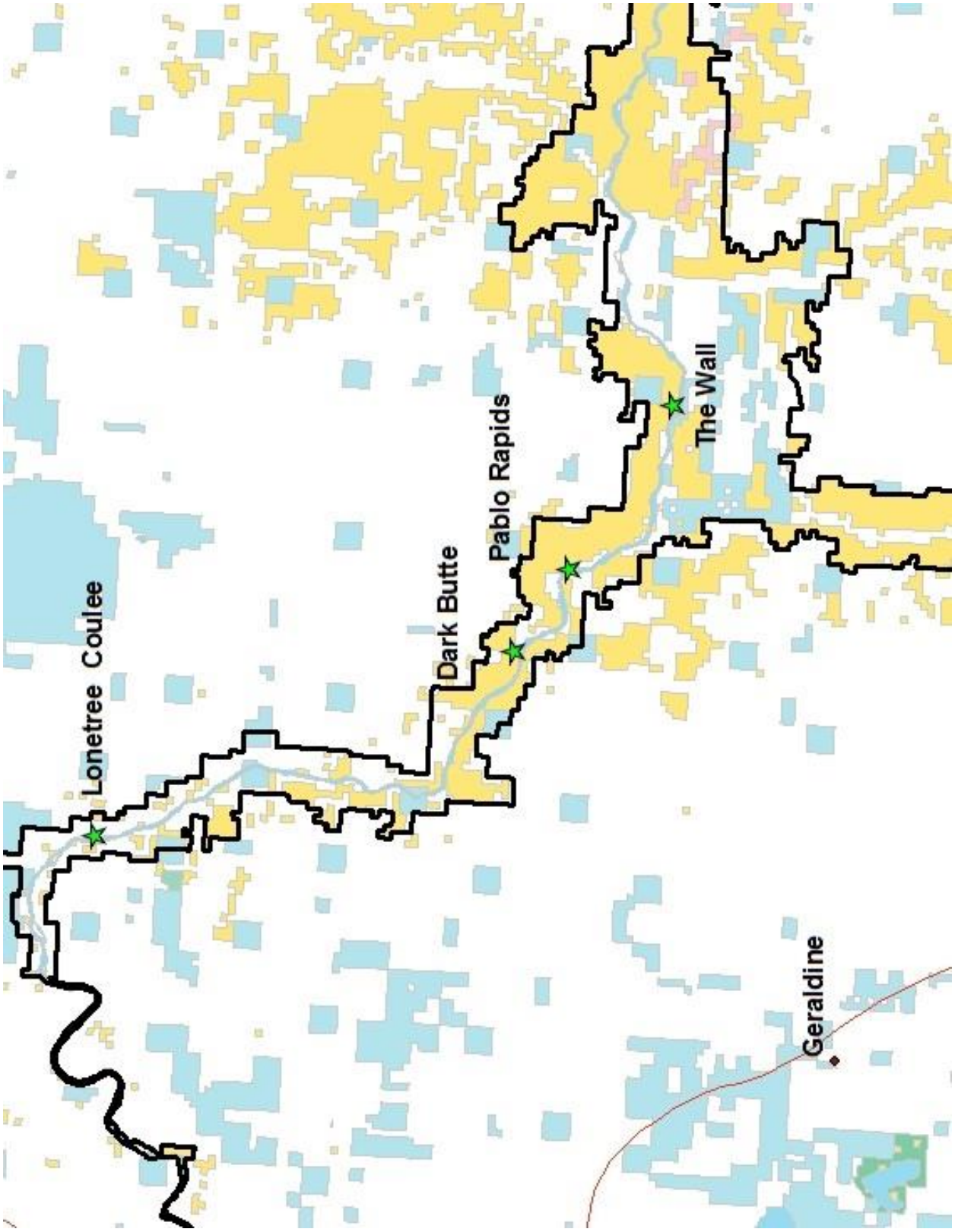
**Holmen, Sarah Ann, "Riparian Wetland Response to Livestock Exclusion in the Lower Columbia River Basin" (2011). Dissertations and Theses. Paper 284.**

## Appendix A (Site Description of Affected Recreation Site and Maps).

**Overview (All sites)**




**Overview (Upper River Sites)**




***Lone Tree Coulee: River Mile 49L*** **T26 N R12 E Sec 13**


Private land under Conservation Easement and Public Recreational Access Easement (MTM 93815, 09/26/2006). Plan is to construct a Level 2, developed boat camp with two separate camping areas, each approximately 1-2 acres in size. Each area will have one fire ring. A future addition may include a sealed vault toilet at the downriver end of the site with exact location to be determined after further analysis. Each exclosure will be four sided with back and sides consisting of three strand wire fence, two strands of barbed wire, and a bottom strand of smooth wire set 18" up from the ground to facilitate wildlife passage. The fence will have wooden brace posts at all four corners and two post/pole walk thru gates for pedestrian passage. The front of the fence (river view side) will be constructed of posts/poles or in a "jack-leg" style. Fences may be flagged with plastic clips where deemed necessary to enhance visibility to wildlife.

**Key:**

***Fire rings***

***Toilet***

***Fenceline/exclosure boundary***

***Dark Butte:  River Mile 68.8L*** **T23 N  R14 E Sec 4**


Public land, existing designated Level 3 primitive boat camp.  Plan is to construct Level 2 developed boat camp with fenced exclosure approximately 3 - 4 acres in size similar to previous exclosure present at this site from 1999 - 2003.  There are two fire rings and two operational composting toilets in place.  A third composting toilet currently in place but not operational will be removed.  The exclosure will be four sided with back and sides consisting of three strand wire fence, two strands of barbed wire, and a bottom strand of smooth wire set 18" up from the ground to facilitate wildlife passage.  The fence will have wooden brace posts at all four corners and two post/pole walk thru gates for pedestrian passage.  The front of the fence (river view side) will be constructed of posts/poles or in a "jack-leg" style.  Fences may be flagged with plastic clips where deemed necessary to enhance visibility to wildlife

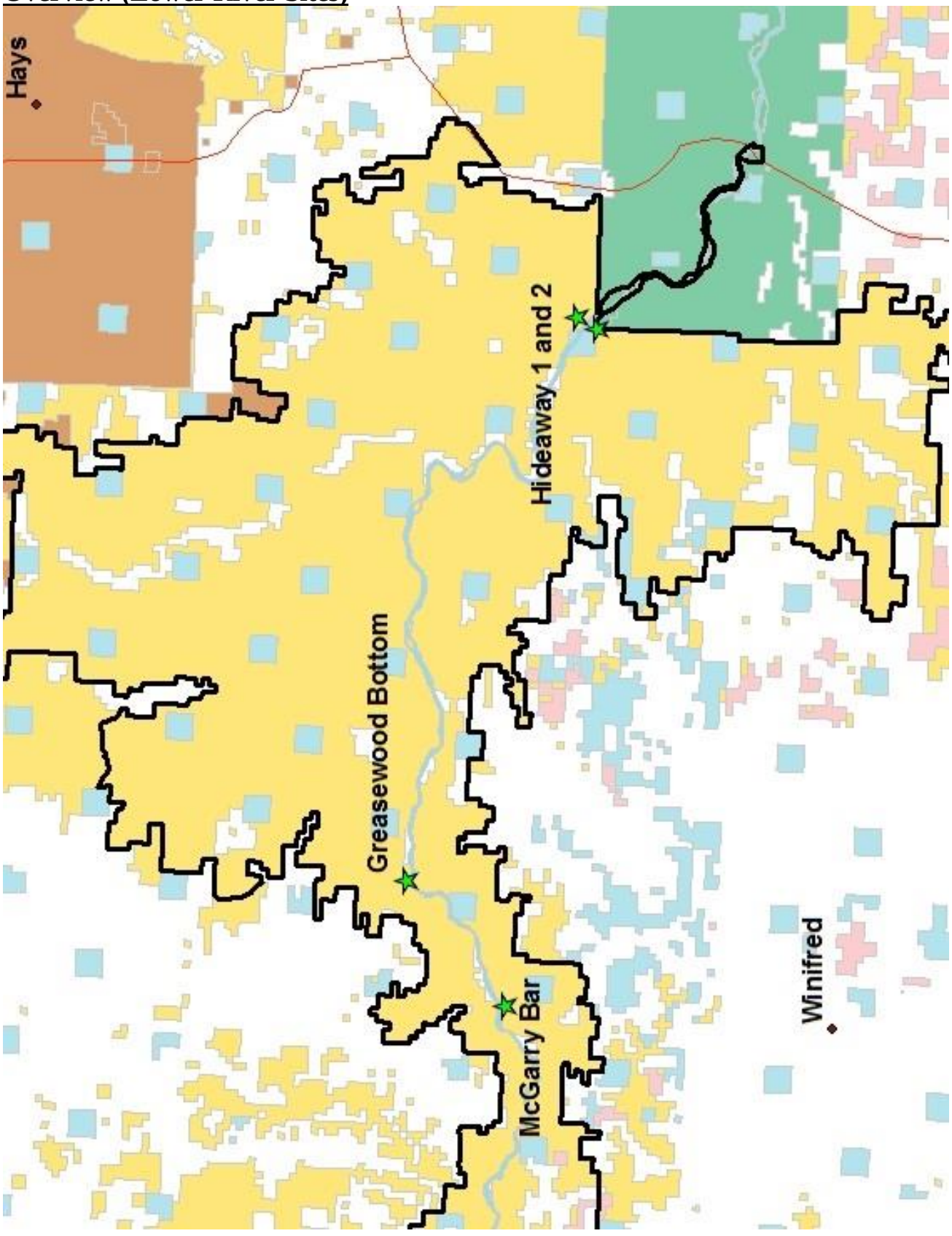
***Pablo Rapids: River Mile* 72.8L T23 N R14 E Sec 12**


Public land, existing designated Level 3 primitive boat camp. Plan is to construct fenced exclosure approximately 2 - 3 acres in size. There is one fire ring currently in place. The exclosure will be four sided with back and sides consisting of three strand wire fence, two strands of barbed wire, and a bottom strand of smooth wire set 18" up from the ground to facilitate wildlife passage. The fence will have wooden brace posts at all four corners and two post/pole walk thru gates for pedestrian passage. The front of the fence (river view side) will be constructed of posts/poles or in a "jack-leg" style. Fences may be flagged with plastic clips where deemed necessary to enhance visibility to wildlife

***The Wall:  River Mile* 81.3L  T22 N  R15 E Sec 2**


Public land, existing designated Level 3 primitive boat camp.  Plan is to construct Level 2 developed boat camp with fenced exclosure approximately 2 - 3 acres in size.  There are two fire rings currently in place.  A portable composting toilet will be installed at the rear of the area on the upriver end of the exclosure.  The exclosure will be four sided with back and sides consisting of three strand wire fence, two strands of barbed wire, and a bottom strand of smooth wire set 18" up from the ground to facilitate wildlife passage. The fence will have wooden brace posts at all four corners and two post/pole walk thru gates for pedestrian passage.  The front of the fence (river view side) will be constructed of posts/poles or in a "jack-leg" style.  Fences may be flagged with plastic clips where deemed necessary to enhance visibility to wildlife

**Overview (Lower River Sites)**



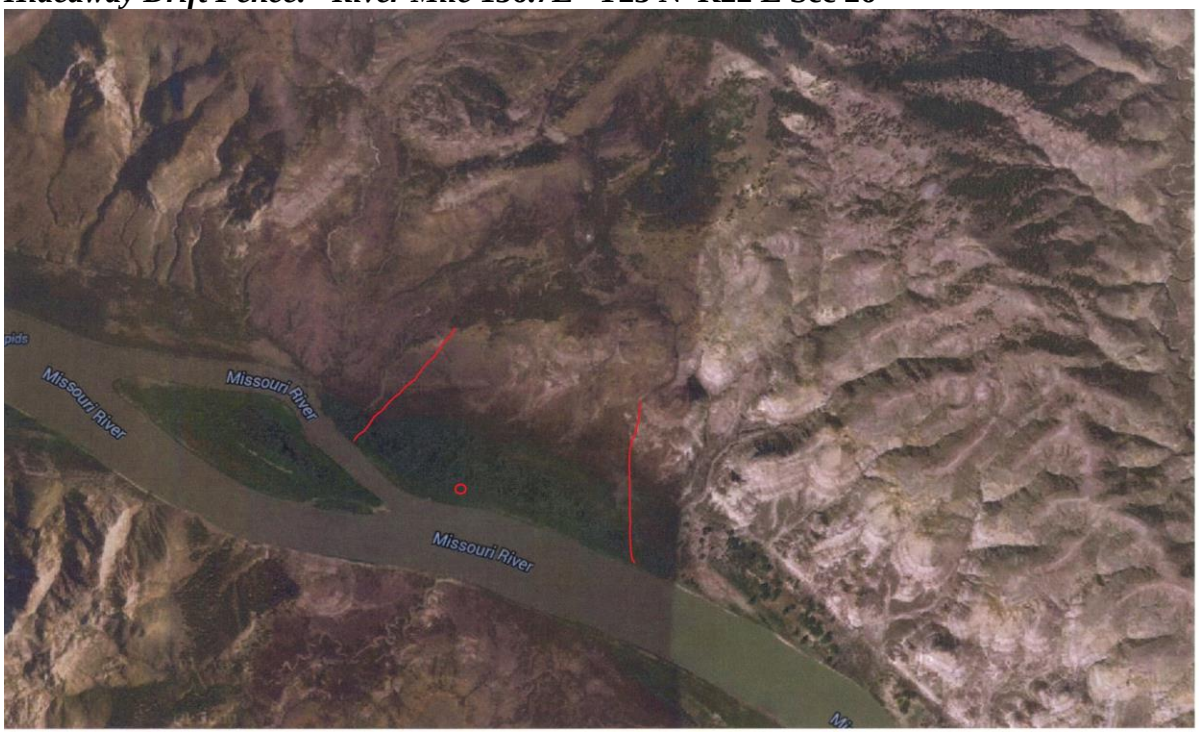
***McGarry Bar:  River Mile* 103.3R  T23 N  R18 E Sec 24**


Public land, existing designated Level 3 primitive boat camp.  Plan is to construct fenced exclosure approximately 2 - 3 acres in size.  The existing fire ring will be repositioned away from the woodland area to the lower end of the site near the L&C campsite marker. The exclosure will be four sided with back and sides consisting of three strand wire fence, two strands of barbed wire, and a bottom strand of smooth wire set 18" up from the ground to facilitate wildlife passage.  The fence will have wooden brace posts at all four corners and two post/pole walk thru gates for pedestrian passage.  The front of the fence (river view side) will be constructed of posts/poles or in a "jack-leg" style.  Fences may be flagged with plastic clips where deemed necessary to enhance visibility to wildlife.

***Greasewood Bottom:  River Mile* 109.6L  T23 N  R19 E Sec 3**


Public land, existing designated Level 4 primitive boat camp.  Plan is to construct Level 3 developed boat camp with fenced exclosure approximately 1-2 acres in size with an addition of one fire ring.  The exclosure will be four sided with back and sides consisting of three strand wire fence, two strands of barbed wire, and a bottom strand of smooth wire set 18" up from the ground to facilitate wildlife passage.  The fence will have wooden brace posts at all four corners and two post/pole walk thru gates for pedestrian passage.  The front of the fence (river view side) will be constructed of posts/poles or in a "jack-leg" style.  Fences may be flagged with plastic clips where deemed necessary to enhance visibility to wildlife.

***Hideaway Drift Fence:  River Mile* 136.7L  T23 N  R22 E Sec 26**




Public land, existing designated Level 3 primitive boat camp.  Plan is to de-construct remnants of damaged post and pole fence exclosure installed in 2008.  Fire ring currently in place will be repositioned away from woodland area.  A series of fences will be constructed at two points as indicated in the above diagram.  The fences will be four strand wire fence, three strand barbed wire and a bottom strand of smooth wire set 18" up from the ground to facilitate wildlife passage.  Fences may be flagged with plastic clips where deemed necessary to enhance visibility to wildlife.  The fence will have wooden brace posts at the interior end with potential for extendable wings at rivers edge to facilitate extension during receding water levels.

***Hideaway 2:*** ***River Mile*** **138.4R T23 N R23 E Sec 31**


Public land, existing designated Level 4 dispersed camping opportunity. Plan is to designate site a Level 3 primitive boat camp. One fire ring will be installed with no additional amenities planned. Future changes in livestock grazing patterns or new grazing permit leases may compel BLM to consider construction of fence exclosures at this location.